IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A transport stream recording apparatus comprising:

an input unit operable to input a transport packet constituting said transport stream;

a generator operable to generate program sequence information indicative of a) an interval in which the number of video and/or audio elementary streams in said transport stream does not change or b) an interval in which a coding attribute of each video and/or audio stream in said transport stream does not change; [[and]]

a first analyzer configured to extract, from said transport packets, a transport packet including data that may provide a reproduction start position;

an entry point map generator configured to generate an entry point map for identifying said transport packet including said data; and

a recording unit operable to record said program sequence information and said entry point map along with said transport stream, on a recording medium, as a database corresponding to said transport stream.

Claim 2 (Original): A transport stream recording apparatus according to claim 1, wherein said generator generates program sequence information indicative of the sequence of transport packets that includes no PCR PID discontinuity.

Claims 3-5 (Canceled).

Claim 6 (Previously Presented): A transport stream recording apparatus according to claim 1, wherein said coding attribute includes video frame frequency.

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Claim 7 (Previously Presented): A transport stream recording apparatus according to claim 1, wherein said coding attribute includes aspect ratio.

Claim 8 (Previously Presented): A transport stream recording apparatus according to claim 1, wherein said coding attribute includes audio coding method.

Claim 9 (Previously Presented): A transport stream recording apparatus according to claim 1, wherein said coding attribute includes audio component type.

Claim 10 (Previously Presented): A transport stream recording apparatus according to claim 1, wherein said coding attribute includes sampling frequency.

Claim 11 (Currently Amended): A transport stream recording method, comprising:

receiving a transport packet constituting said transport stream, by an input unit;

generating program sequence information indicative of a) an interval in which the number of video and/or audio elementary streams in said transport stream does not change or b) an interval in which a coding attribute of each video and/or audio stream in said transport stream does not change, by a first generator; [[and]]

analyzing to extract, from said transport packets, a transport packet including data that may provide a reproduction start position, by an analyzer;

generating an entry point map for identifying said transport packet including said data, by a second generator; and

recording said program sequence information along with said transport stream.

Claims 12-13 (Canceled).

Claim 14 (Currently Amended): A computer readable storage medium including computer executable code embedded in the computer readable storage medium for performing a method for recording a transport stream, the computer program code performing:

receiving a transport packet by an input unit, said transport stream including said transport packet;

generating program sequence information indicative of a) an interval in which the number of video and/or audio elementary streams in said transport stream does not change or b) an interval in which a coding attribute of each video and/or audio stream in said transport stream does not change, by a first generator; [[and]]

analyzing to extract, from said transport packets, a transport packet including data that may provide a reproduction start position, by an analyzer;

generating an entry point map for identifying said transport packet including said data, by a second generator; and

recording said program sequence information along with said transport stream.

Claims 15-16 (Canceled).

Claim 17 (New): A transport stream recording apparatus according to claim 1, wherein said first analyzer extracts a transport packet including I picture data as said transport packet including said data that may provide said reproduction start position; and

said entry point map generator generates said entry point map by use of positional information of said transport packet including said I picture data and time information of said I picture.

Claim 18 (New): A transport stream reproducing apparatus for reproducing a transport stream recorded on a recording medium, comprising:

a reproducing unit operable to reproduce said transport stream, program sequence information, and an entry point map from said recording medium, said transport stream including a sequence of transport packets, said program sequence information indicating the sequence of transport packets that includes no program attribute discontinuity and said entry point map identifying the position of the entry point;

a processor operable to generate an output signal to be presented; and

a controller operable to control the processor on the basis of the program sequence information and the entry point map.

Claim 19 (New): A transport stream reproducing method for reproducing a transport stream recorded on a recording medium, comprising:

reproducing said transport stream, program sequence information, and entry point map from said recording medium, said transport stream including a sequence of transport packets, said program sequence information indicating the sequence of transport packets that includes no program attribute discontinuity and said entry point map identifying the position of the entry point, by a reproducing unit;

generating an output signal to be presented, by a generator; and

controlling the generating on the basis of the program sequence information and the entry point map, by a controller.